

11

THE CONDOR

A Magazine of Western
Ornithology

Volume XXII November-December, 1920 Number 6



COOPER ORNITHOLOGICAL CLUB

THE CONDOR

A Magazine of Western Ornithology
Published Bi-Monthly by the Cooper Ornithological Club

Entered as second-class matter November 29, 1919, at the post-office at Berkeley,
California, under Act of Congress of March 3, 1879
Issued from the Office of THE CONDOR, Museum of Vertebrate Zoology, Berkeley, California

SUBSCRIPTION RATES

Two Dollars per Year in the United States, payable in advance.

Forty Cents the single copy.

Two Dollars and Twenty-five Cents per Year in all other countries in the International Postal Union.

COOPER CLUB DUES

Two Dollars per year for members residing in the United States.

Two Dollars and Twenty-five Cents in all other countries.

Manuscripts for publication, and Books and Papers for Review, should be sent to the Editor, J. GRINNELL,
Museum of Vertebrate Zoology, University of California, Berkeley, California.

Claims for missing or imperfect numbers should be made of the Business Manager, as addressed below,
within thirty days of date of issue.

Cooper Club Dues, Subscriptions to The Condor, and Exchanges, should be sent to the Business
Manager.

For the Purchase of Back Volumes of The Condor or of the Pacific Coast Avifauna series, apply to the
Business Manager.

W. LEE CHAMBERS, Business Manager, Eagle Rock, Los Angeles County, California.

Issued December 4, 1920

CONTENTS

The Wing Claw in Swifts.....	Alexander Wetmore	197
Nesting of the Olive-sided Flycatcher in Berkeley, California (with three photos)	Joseph Dixon	200

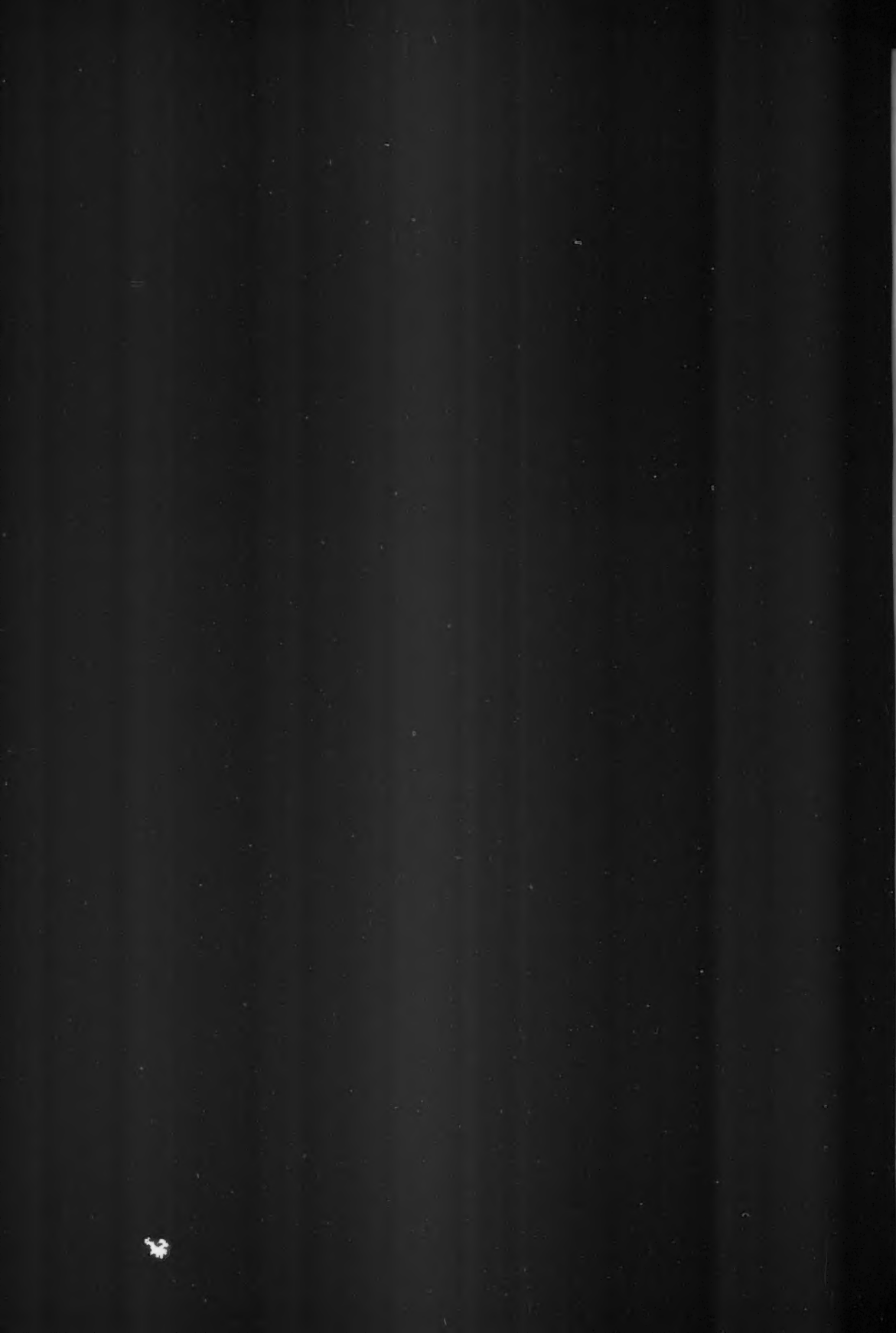
FROM FIELD AND STUDY

The Probable Breeding of the Aleutian Tern in Southeastern Alaska— a Query	F. Seymour Hersey	203
Comments upon the Safety of Sea Birds and upon the "Probable" Oc- currence of the Northern Bald Eagle in California.....	G. Willett	204
Eastern Fox Sparrow at Seattle.....	Thos. D. Burleigh	205
The Yellow-headed Blackbird Flocking with Brewer Blackbirds.....	Frank N. Bassett	205
Note on the Nesting Habits of the Osprey in Yellowstone Park.....	Claude Gignoux	205
Some Nesting Habits of the Pied-billed Grebe.....	Griffing Bancroft	206
The Orange-crowned Warbler a Possible Winter Resident at Seattle, Washington	Thos. D. Burleigh	206
Notes on the Calliope Hummingbird.....	L. E. Wyman	206

EDITORIAL NOTES AND NEWS.....	207
-------------------------------	-----

MINUTES OF COOPER CLUB MEETINGS.....	208
--------------------------------------	-----

INDEX TO VOLUME XXII.....	209
---------------------------	-----



THE CONDOR

A Bi-Monthly Magazine of
Western Ornithology

Volume XXII

November-December, 1920

Number 6

[Issued December 4, 1920]

THE WING CLAW IN SWIFTS

By ALEXANDER WETMORE

IN a paper on "The Claws and Spurs on Birds' Wings", Jeffries (Proc. Boston Soc. Nat. Hist., xxi, 1881, pp. 301-306) recorded in a tabular survey of the occurrence of wing claws in birds that the wing claw was present in the Old World swifts of the genus *Micropus* and that no wing claw was found in the Chimney Swift (*Chaetura pelagica*).

A brief examination of a series of Chimney Swifts showed the present writer that this species possessed well developed wing claws so that what had appeared to be another character separating the two subfamilies of spiny-tailed and soft-tailed swifts proved invalid. Opportunity was taken in this connection to examine for this character all of the species of swifts available in the collections of the United States National Museum with results that proved of some interest. In all, 48 species belonging to 12 genera were available, as indicated in the following list.

In arranging my notes on these swifts I have encountered difficulty in the arrangement, treatment and choice of names to be used; for there have been varying opinions as to the limits of groups and the allocation of subspecies, while no recent comprehensive monograph has covered the entire family in a manner wholly satisfactory. In general the arrangement of the genera is that given by Mr. Ridgway (Bull. 50, U. S. Nat. Mus., v, 1911, pp. 685-686), with the inclusion of *Tachynautes* (Oberholser, Proc. U. S. Nat. Mus., xxviii, 1905, p. 860), while the majority of the species are taken as they stand in Sharpe's Hand-List (vol. ii, 1900, pp. 89-96). The genus *Collocalia* is based on Oberholser's monograph of this group (Proc. Acad. Nat. Sci. Phila., vol. 58, 1906, pp. 177-212), save that the treatment of *Collocalia fueiphaga*, *C. vestita*, and *C. lowi* is that of Stresemann (Verh. Orn. Ges. Bayern, Bd. xii, 1914, pp. 1-12). New species and subspecies not covered by these authors are included in what appears to be their logical positions. The writer does not venture to say that

the combination produced is a happy one, but believes that it will at least enable others to determine what birds he has seen.

<i>Micropus melba</i> (Linnæus)	<i>Collocalia innominata</i> Hume
<i>Micropus aequatorialis</i> (Müller)	<i>Collocalia ocista</i> Oberholser
<i>Micropus apus</i> (Linnæus)	<i>Collocalia fuciphaga fuciphaga</i>
<i>Micropus pacificus</i> (Latham)	(Thunberg)
<i>Micropus horus</i> (Heuglin)	<i>Collocalia fuciphaga vanikorensis</i>
<i>Micropus affinis</i> (J. E. Gray)	(Quoy and Gaimard)
<i>Micropus subfurcatus</i> (Blyth)	<i>Collocalia fuciphaga amelis</i> Oberholser
<i>Micropus andicola</i> (Lafresnaye and D'Orbigny)	<i>Collocalia fuciphaga unicolor</i> (Jerdon)
<i>Micropus myoptilus</i> (Salvadori)	<i>Collocalia vestita vestita</i> (Lesson)
<i>Aeronautes melanoleucus</i> (Baird)	<i>Collocalia vestita mearnsi</i> Oberholser
<i>Panyptila sanctihieronymi</i> Salvin	<i>Collocalia vestita elaphra</i> Oberholser
<i>Panyptila cayanensis</i> (Gmellin)	<i>Collocalia vestita aenigma</i> Riley
<i>Tachynautes parvus</i> (Lichtenstein)	<i>Collocalia origenis</i> Oberholser
<i>Tachornis infumatus</i> (Sclater)	<i>Collocalia lowi lowi</i> (Sharpe)
<i>Tachornis phoenicobius</i> Gosse	<i>Collocalia lowi palawanensis</i> Stresemann
<i>Hirundapus celebensis</i> (Sclater)	<i>Collocalia inopina</i> Thayer and Bangs
<i>Hirundapus caudacutus</i> (Latham)	<i>Collocalia thespesia</i> Oberholser
<i>Hirundapus giganteus</i> (Temminck)	<i>Collocalia francica townsendi</i> Oberholser
<i>Mearnsia picina</i> (Tweeddale)	<i>Collocalia francica inexpectata</i> Hume
<i>Streptoprocne zonaris</i> (Shaw)	<i>Collocalia francica germani</i> Oustalet
<i>Streptoprocne semicollaris</i> (Saussure)	<i>Collocalia troglodytes</i> G. R. Gray
<i>Nepheocetes niger</i> (Gmellin)	<i>Collocalia marginata</i> Salvadori
<i>Cypseloides brunneitorques</i> (Lafresnaye)	<i>Collocalia linchi affinis</i> Beavan
<i>Cypseloides cherriei</i> Ridgway	<i>Collocalia linchi elachyptera</i> Oberholser
<i>Chaetura pelagica</i> (Linnæus)	<i>Collocalia linchi isonota</i> Oberholser
<i>Chaetura vauzi</i> (Townsend)	<i>Collocalia linchi oberholseri</i> Stresemann
<i>Chaetura richmondi</i> Ridgway	<i>Collocalia dodgeti</i> Richmond
<i>Chaetura gauderi</i> Lawrence	<i>Collocalia esculenta</i> (Linnæus)
<i>Chaetura acuta</i> (Gmellin)	<i>Collocalia bartschi</i> Mearns
<i>Chaetura poliura</i> (Temminck)	
<i>Chaetura cinereiventris</i> Sclater	
<i>Chaetura stictilaema</i> (Reichenow)	
<i>Chaetura leucopygialis</i> (Blyth)	

The wing claw in the Micropodidae is placed near the tip of the thumb or pollex and is concealed beneath the feathers that form a sharp anterior margin on the wing at that point. The large series of birds studied were examined under a binocular dissecting microscope with a magnification of eight diameters. The use of this instrument left both hands free to manipulate the bird, a necessary arrangement, as the claw is small and at times difficult to locate among the feathers. The claw in general is blackish or dusky in color, and is comparatively long, with the tip recurved in a slight hook. It is attached rather loosely and may be removed easily, but where a claw has been broken away, its former location is plainly indicated by a scar. The form of the claw varies to some extent, and in abnormal individuals it may degenerate into a short knob with slight projection.

In all of the swifts examined wing claws were normally developed save in one group of species belonging to the genus *Collocalia*. In the various subspecies of *C. linchi* the wing claw was normal in some cases, rudimentary in others, and occasionally was absent on one or both wings. The same was true in a

series of nine *C. esculenta*. The wing claw was much reduced in seven *C. troglodytes* and in one specimen was absent on one wing. In *Collocalia marginata* no trace of a wing claw was found in an examination of both wings of nine individuals, and wing claws were absent also in the type of *C. dodgei* (the only specimen of this species seen). Wing claws were present in the type specimen of *C. bartschi*. In the other species of *Collocalia* available (*C. innominata*, *ocista*, *fuciphaga*, *vestita*, *origenis*, *lowi*, *inopina*, *thespesia*, and *francica*) wing claws were present on both wings, though occasionally they were small and often were curled and twisted. In one individual of *C. f. amelis* the wing claw on the right wing grew from the base of the pollex instead of the tip. The wing claw may possibly develop rather late in the growth of the young bird, as I found it absent entirely in three nestlings of *Collocalia l. isonota*, but present in both wings in a fully fledged young of *Collocalia origenis*. It is interesting to note that in the Tree Swifts (Hemiprocnidae), a family considered to be closely allied to the true swifts (Micropodidae), no wing claw is present. The species examined include *Hemiprocne longipennis*, *mystacea*, *comata*, *wallacei* and *perlonga*.

While it has proved that the wing claw in the Micropodidae is not a character of taxonomic value it has been interesting to note its persistence in general and its absence in certain cases. The section of edible nest swiftlets, covering the small blue-black species with more or less white in the plumage, seems to be on the way to discarding the wing claw, though here the loss is not as yet universal and may vary in one species or even in one individual. From the present evidence I am inclined to consider the wing claw in swifts as an archaic trait that is no longer of value and is on the way to being lost. There is no evidence at hand to show that the claw is used by these birds in attaching or climbing on the rough surfaces on which they rest. No wear is evident on the wing claw itself, nor is there abrasion on the feathers concealing it.

From a limited amount of material (all in dried skins) it seems that the wing claw does not appear until the young bird is well feathered, so that it is not of use in a juvenile stage. This, however, should be carefully verified in fresh material for, if this claw be considered an archaic character, it is strange if it does not appear very early in the life of the individual.

Biological Survey, Washington, D. C., May 26, 1920.

NESTING OF THE OLIVE-SIDED FLYCATCHER IN BERKELEY, CALIFORNIA

By JOSEPH DIXON

WITH THREE PHOTOS

THE OCCURRENCE of the Olive-sided Flycatcher (*Nuttallornis borealis*) in the San Francisco Bay region in summer has been noted by a number of observers (for example, Fisher, Condor, VI, p. 108; Grinnell, Condor, XVI, p. 32; and Hansen and Squires, Condor, XIX, p. 60). While this boreal

species has thus already been regarded as a breeding bird of the Bay region, yet exact breeding evidence in the form of nests, eggs or young appears to be lacking. Through the interest and initiative of Donald D. McLean, a Cooper Club member, definite breeding data is now available, he having discovered the nest and eggs now to be described.

On June 12, 1920, a set of four slightly incubated eggs of the Olive-sided Flycatcher, together with the nest attached to the limb supporting it, and accompanying photographs, were secured by Mr. McLean and the writer from a slender Monterey cypress that stands on the south-facing hillside just north of the Claremont Hotel, in Berkeley. The birds had started a nest in an adjoining cypress, but for some unknown reason they had abandoned it and moved to the new location. The nest was placed fifty-seven feet above the ground, by actual measurement, and thirty inches from the tip of a long slender upper branch of a broken-topped cypress. The situation was exposed, but



Fig. 38. NEST SITE OF OLIVE-SIDED FLYCATCHER IN MONTEREY CYPRESS. THE TAIL OF THE FEMALE, ON THE NEST, SHOWS AS A BLACK DOT AT THE POINT WHERE THE MARGINAL ARROWS WOULD INTERSECT.

the brooding bird was partially screened from above by an overhanging branch. The nest was firmly ensconced on top of a cluster of twelve cypress cones, the main limb itself at this point being insufficient, as it was only one-half inch in diameter. The foundation of the nest consists of dead bare cypress twigs and a few dry grass stems. It is lined with fine dry pine needles, stiff fibrous rootlets, and horsehair. The outside dimensions of the nest are $6 \times 6\frac{1}{2} \times 2\frac{1}{2}$



Fig. 39. THE NEST WAS FIRMLY ENSCONCED ON TOP OF A CLUSTER OF TWELVE CYPRESS CONES. IT WAS PLACED THIRTY INCHES FROM THE TIP OF A SLENDER UPPER BRANCH OF THE BROKEN-TOPPED CYPRESS.

inches ($15.3 \times 16.5 \times 6.5$ centimeters) and the inside dimensions, $3\frac{1}{2} \times 3\frac{3}{4} \times 1\frac{1}{2}$ inches ($9.0 \times 9.5 \times 3.8$ centimeters). The four eggs measure 23.0×16.5 , 22.5×16.9 , 22.2×17.0 and 22.6×17.0 millimeters, respectively. The ground color of the eggs is normal for the species, being light ochraceous-salmon, but the markings of the eggs are odd. Instead of being wreathed about the larger end with clusters of fairly well defined spots, all four eggs have a single heavy splotch or smudge, six by ten millimeters in extent in one case, on one side or surface of the egg, while the opposite surface is practically unmarked. These splotches are light vinaceous-drab, fading about the edges to cinnamon-rufous (these color names from Ridgway, 1912). The set appears either very handsome or plain according to the position of the eggs when viewed. When first observed in the nest the plain aspects of the eggs were most in view.

A bare dead branch of a nearby eucalyptus was the favorite perch of the pugnacious male, and his duty seemed to be quickly to put to rout any luckless bird that happened to come within twenty-five feet of the nest. Excreta picked up below this favorite perch were found to consist almost entirely of chitinous remains, mandibles and elytra, of insects, chiefly beetles. The dried remains of several blow-flies were found on the edge of the nest, crumbs fallen, as it

were, from the female flycatcher's feeding tray—if she was in truth fed there by the male.

We had hoped that the birds would nest in such a place that a series of photographs illustrating the life history of this species could be secured; but the slender nest branch swaying about in the wind, the distance of the nest



FIG. 40. THE FOUNDATION OF THE NEST CONSISTED OF BARE DEAD CYPRESS TWIGS AND A FEW DRY GRASS STEMS. IT WAS LINED WITH FINE DRY PINE NEEDLES, STIFF FIBROUS ROOTLETS AND HORSEHAIR. ALL FOUR EGGS WERE WELL MARKED ON ONE SIDE OR SURFACE, BUT WERE PLAIN ON THE OTHER.

from the tree trunk, and the clouds of smoke and soot from the nearby hotel, proved too serious handicaps, and the life series idea had to be abandoned. Through the generosity of Mr. McLean the four eggs together with the nest now constitute accession no. 1783, recorded as a gift from him, in the University of California Museum of Vertebrate Zoology.

Berkeley, California, June 15, 1920.

FROM FIELD AND STUDY

The Probable Breeding of the Aleutian Tern in Southeastern Alaska—a Query.—A record in the May, 1920, number of THE CONDOR (page 111) of the probable breeding of the Aleutian Tern near Yakutat appears to rest on "sight" identification only, and the actions of Mr. Walker's birds were so different from the usual habits of this species that I am forced to doubt if the birds seen really were Aleutian Terns.

Sterna aleutica has always been a decidedly rare bird, and authentic eggs have been taken in North America at three places only. A single egg was taken by Bischoff on Kadiak Island in 1868 together with the parent which is the type of the species; but since that date it has not been found breeding in southeastern Alaska, and the supposition that it bred in the Aleutian Islands (which was responsible for the bird's name) has not been substantiated by any of the ornithologists who have visited the chain. Mr. E. W. Nelson was the next ornithologist to take eggs. During his stay at St. Michael from 1877 to 1881 he found two breeding colonies. One was on an island in St. Michael Bay and the other on a small island near the village of Kegikhtowik about eighteen miles away. Nearly all the islands in this region are rocky and rise abruptly from the sea or else are low and marshy. The two islands where these terns breed are of a different character, rising from the sea in a sharp incline for some 25 or 30 feet and being level on top, or fairly so, with a covering of dry matted grass and moss. Apparently these birds require this type of nesting ground.

No one seems to have found the Aleutian Tern breeding in North America since Mr. Nelson's records were published until 1915 when the present writer visited St. Michael and collected eggs on the island in St. Michael Bay.

There are a number of supposed eggs of this species in American collections taken by a whaling captain on Stuart Island. These eggs I believe are eggs of the Arctic Tern; at least all that I have seen show none of the characteristics that render the eggs of the Aleutian Tern distinguishable at a glance from those of *Sterna paradisaea*.

There are certain ways in which the Aleutian Tern can be identified in life with certainty. The best field mark I consider to be its voice. The usual note is a three syllabled whistle suggesting one of the small sandpipers (*Ereunetes*) and not in the least tern-like. I heard the harsh grating note that other terns use, but once, and that was from a wounded bird. The second distinguishing characteristic is its habitual shyness. Even when a person is walking over its nesting ground the birds usually keep out of gun range and it is rare for them to dart down at one's head. I never had an Aleutian Tern strike my head although this is a common habit with the Arctic Tern. Even a wounded bird on the ground, which will usually attract other species of terns, only serves to draw this shy bird a little nearer. It took me a number of visits of several hours each to collect a small series of these birds, while the same number of Arctic or Common Terns could be taken in any colony in a few minutes. *Aleutica* can be distinguished from *paradisaea* by its flight, but this distinction is less noticeable except upon direct comparison between the two species. *Aleutica* has slower wing beats and there is a certain lack of directness about its flight that once learned is diagnostic. In general appearance the Aleutian Tern seems larger and darker colored than the Arctic, but these impressions are often lost in poor light. The white forehead and black feet and bill, so noticeable in the bird in the hand, can be seen in life under exceptional light conditions only.

There is one way in which the Arctic Tern might be confused with the Aleutian Tern by a person who was not familiar with the latter species. In a certain stage of plumage, summer specimens of *paradisaea* show considerable white on the forehead. This plumage was described many years ago under the name *Sterna portlandica* and probably represents birds one year old that, because of deficient vitality, or from some other cause, have failed to acquire the full nuptial plumage at the spring molt. This plumage is somewhat rare and many colonies show no birds in this stage, but I have seen others which contained a considerable number of these, so-called Portland Terns. I believe it is not definitely known if birds in this plumage breed; but such birds in a colony might act as described by Mr. Walker and their markings lead to the impression

that they were Aleutian Terns. I have even known of several of them having been collected for this species and their identity not discovered until some time later.

In view of the above facts it seems as if the probable breeding of the Aleutian Tern in southeastern Alaska is open to doubt unless specimens of the birds were actually taken.—F. SEYMOUR HERSEY, Taunton, Massachusetts, August 14, 1920.

Comments upon the Safety of Sea Birds and upon the "Probable" Occurrence of the Northern Bald Eagle in California.—In THE CONDOR for May-June, 1920, appear two articles upon which the undersigned seeks the privilege of commenting.

The article by J. Grinnell on page 101, entitled "The Existence of Sea Birds a Relatively Safe One," appears to the writer, after a number of years careful study of this very question, to be most timely and accurate and not open to any criticism whatever. The only reason for taking up the matter here is a desire to enlarge somewhat on the theme of the original article.

We are all familiar with the frequent allusions to the "sea birds killed by storms" that have appeared in print in times past. A number of years ago the writer began to visit the California beaches after severe storms, expecting to find dead and crippled sea birds plentiful. This was not found to be the case, however, and, after several years observation along the beaches and the examination of hundreds of dead birds, the conclusion was arrived at that the storms have nothing whatever to do with the birds found dead along shore. In fact the greatest numbers of dead birds were noted at times when there had been no storms for weeks. Another point to be considered is that birds killed or crippled by storms blowing on-shore would still be fat when they reached the beach. On the contrary, a great percentage of the shearwaters, fulmars and other birds found dead along our beaches are in a more or less emaciated condition, evidence that they died of disease. Furthermore, in many cases their internal organs were swarming with parasites. It is the writer's belief that sea birds, particularly those that migrate in companies, are at times subject to epidemics to which large numbers succumb and that this fact is responsible for the numbers of dead birds on the beaches at certain times, storms having nothing whatever to do with it.

The most striking example known to the writer of the ability of sea birds to withstand severe weather conditions is that of the young of the Ancient Murrelet (*Synthliboramphus antiquus*). At midnight, with the aid of the light of a lantern, the writer has watched these downy chicks, not more than three or four days old, dive through the surf in response to the cry of the parent bird and head out to sea into the teeth of a southeasterly gale, and this at a time when boulders weighing a hundred pounds or more were being rolled up and down the beach like so many pebbles. Furthermore, all evidence points to the fact that these young birds remain on the open sea many miles from land until fully grown, in spite of the fact that in this latitude severe gales are frequent through the summer months. In eight seasons spent in this region the writer has never seen a young murrelet anywhere near the shore after it had once taken to the water. In fact, the half-grown young had never been noted at all until this season (1920), when, on July 21, A. M. Bailey and the writer secured a pair of adult birds and a pair of young about two-thirds grown in the middle of the channel between Forrester and Dall islands, ten or twelve miles off-shore.

The second article upon which the writer desires to comment is the one by Mr. J. H. Fleming, entitled "The Northern Bald Eagle as a Probable Californian Bird" (page 110). Now, with all due regard to the high ornithological standing of the author of this note, it seems to the writer that the evidence submitted is far too inconclusive to serve as a basis for recording the Northern Bald Eagle as a "probable" Californian bird.

Let us consider briefly the evidence as presented. In the beginning of the article Mr. Fleming states that the Northern Bald Eagle "should occur at least as a migrant". This statement is made arbitrarily without presentation of any facts tending to show that the Northern Bald Eagle in the southwestern portion of its range is to any extent migratory. The writer, whose experience with this bird in southeastern Alaska covers a period of eight years, finds that it is, in the extreme southeastern part of Alaska at least, resident throughout the year, being fully as abundant in winter as in summer. Near Craig, Prince of Wales Island, during the winter of 1919-20, several pairs of birds

were noted that remained in the vicinity of their nests throughout the entire winter, eggs being laid in April.

As to the difference of a few millimeters in wing length: How much value should be attached to this feature in considering an individual of a race known to show such a vast amount of variation in size, individually? The writer has measured several extra small adult birds killed in southeastern Alaska that, if considered from point of size alone, would necessarily have to be referred to the southern form. It is improbable that any CONDO reader would consider even momentarily the recording of the southern bird from Alaska on this evidence; so, would not the old saying "It's a poor rule that won't work both ways" pertain to this case?

The fact is that there is no hard and fast line of demarcation between the two forms of the Bald Eagle. The size difference is only an *average* difference. The northern form *averages* larger than the southern form, and individual variants may be found within the known range of either form that, if considered from a standpoint of size alone, could be referred to the other subspecies.

In view of these facts it seems to the writer that the preponderance of evidence points to the fact that Mr. Fleming's Lakeport bird is an unusually large individual of the Southern Bald Eagle (*Haliaeetus leucocephalus leucocephalus*) and may not be properly considered as demonstrating even the "probable" occurrence of the northern form in California.—G. WILLETT, *Forrester Island, Alaska, August 5, 1920.*

Eastern Fox Sparrow at Seattle.—On February 15, 1920, at Renton, a small town a few miles southeast of Seattle, Washington, a typical Eastern Fox Sparrow (*Passerella iliaca iliaca*) was secured as it fed in a thicket bordering an open field with a miscellaneous gathering of Rusty Song Sparrows and Oregon Towhees. Even before it was shot its dissimilarity to the several subspecies of Fox Sparrows that occur here was easily noticeable, and once in the hand there was no question as to its identity. This is as far as I know, the first record for this species for the state of Washington. The specimen itself is now in the collection of Mr. D. E. Brown, of Seattle.—TIROS, D. BURLEIGH, *Pittsburgh, Pennsylvania, September 6, 1920.*

The Yellow-headed Blackbird Flocking with Brewer Blackbirds.—While passing through Lake Valley on August 12, 1920, about two miles north of Meyers, El Dorado County, a flock of about seventy-five Brewer Blackbirds (*Euphagus cyanocephalus*) flushed from the road and flew to a lodgepole pine tree in the adjoining field about a hundred yards distant. In their midst was a single Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*) showing in striking contrast. I took the bird, which proved to be a young male.

The Yellow-headed Blackbird is frequently associated with Red-winged Blackbirds, and Coues (*Birds of the Northwest*, 1874, p. 190) mentions them flocking with Cowbirds, but its presence with Brewer Blackbirds seems rather unusual, and all the more strange as there were no Redwings seen in the vicinity.—FRANK N. BASSETT, *Alameda, California, August 27, 1920.*

Note on the Nesting Habits of the Osprey in Yellowstone Park.—On the spires of rock which stand up perpendicularly from the steep sides of the Canyon of the Yellowstone River in the Yellowstone National Park are a large number of nests of the Osprey (*Pandion haliaetus carolinensis*). All nests observed from the side of the canyon were without any shelter or protection of any kind. They were great collections of sticks resting on the rock, and apparently a new nest was built on top of the nest of the preceding year or years. At the time of our visit to the Yellowstone, in July, 1920, a young bird was observed flopping about in one nest, and an adult bird was standing on the side of the nest with the back to the sun so as to project its shadow directly into the nest. We watched this nest for fully an hour and during all that time the adult bird's shadow was thrown into the center of the nest. The parent bird was clearly keeping the young in the shade. During all the time of the observation the sun was shining brightly and the weather was warm.—CLAUDE GIGNOUX, *Berkeley, California, September 8, 1920.*

Some Nesting Habits of the Pied-billed Grebe.—There seems to be some uncertainty among authorities as to the sitting habits of the Pied-billed Grebe (*Podilymbus podiceps*). I was fortunate enough, on June 9, 1920, to surprise one of these birds on its nest in such a way as to prove, to my own satisfaction at least, that it was incubating its eggs in normal fashion.

I was driving along the county road from Firebaugh to Merced, California, watching the bordering tule patches closely, when I saw one of these grebes sitting. I stopped my machine and immediately the bird became suspicious, but did not move. Undoubtedly she had become used to automobiles passing. There was a small pond in the ditch by the roadside and in this the nest was floating. It was not more than twelve or fifteen feet from me and the black band across the bird's bill was easily noticeable.

My son and I watched her for several minutes, all of us remaining motionless. Then the boy left the car on the farther side without the grebe having seen him. When he came around the end of the auto and she could see him she immediately slipped into the water.

As she half rose preparatory to leaving, I could see her eggs, very clearly and distinctly. But the most interesting thing was to watch her cover them. Her body moved without a pause, yet the bird contrived to take three quick pecks at the sides of her nest, pulling the material in her bill under her body. The time consumed was about twice what a chicken would take to peck three mouthfuls from a feed bin; approximately two seconds, I estimate. In any event there was no perceptible time lost. She seemed to leave the nest as easily and as quickly as any other bird. But when we reached it, not a speck of any part of her six eggs was visible.

Mr. Bent (page 42 of his "Life Histories of North American Diving Birds") states that the young "cling tenaciously to the parent bird while she dives and brings them up again." On June 25, 1919, I saw a Pied-billed Grebe with three young that could hardly have been more than 24 hours old. When I first noticed them the babies were sitting on the mother's back, a very pretty sight. At my approach she dove and left them bobbing on the surface of the water like so many corks. She came up a few yards away and at once they all swam to her and climbed aboard. This process was repeated several times and not once was one of the babies dragged under at all.

I must apologize for my use of the pronoun "she". Of course I had no means of knowing the sex of the parent bird in either of the above cases.—GRIFFING BANCROFT, San Diego, California, September 12, 1920.

The Orange-crowned Warbler a Possible Winter Resident at Seattle, Washington.—Although until the past winter, 1919-20, there were only a few spring and fall records for the Orange-crowned Warbler (*Vermivora celata*) on the Puget Sound, it seems now as if the status of this species about Seattle may have to be decidedly changed. It was on December 26 that I secured the first specimen and in the next two months five others were seen, three of which were collected. All were invariably found feeding singly with restless wandering flocks of Kinglets and Chickadees, and being quiet and inconspicuous more were probably overlooked than were actually recorded. The dates on which they were seen were December 26, one bird, January 31, one bird, February 9, one bird, February 13, two birds, and February 27, one bird. Whether this species has merely been overlooked, or whether this winter saw an unusual invasion of these birds, remains for the future to decide. Of the four birds taken, one was sent to the Biological Survey for identification and was returned marked as a separate subspecies of the Orange-crowned Warbler that as yet has not been recognized by the A. O. U., for which reason I have used the specific name. All of them are now in the collection of Mr. D. E. Brown of Seattle.—THOS. D. BURLEIGH, Pittsburgh, Pennsylvania, September 6, 1920.

Notes on the Calliope Hummingbird.—The writer spent the week from June 18 to 25 at Seven Oaks, in the San Bernardino Mountains, elevation 5200 feet. This proved to be just at the height of the mating season of the Calliope Hummers (*Stellula calliope*), which were feeding abundantly on a species of "paint-brush" that grew rankly in a small hillside cienaga just above the cabins.

While the birds were shy when I moved about openly, they were quite otherwise when I stood or sat quietly beside a clump of willow or an oak-scrub that grew in the locality. From these screens I watched the birds by the hour, at all distances from thirty yards to four feet or less. Dozens of times individuals appeared from nowhere, apparently, and disappeared in like manner, their flight so bullet-like that the eye could hardly follow them. Numerous times I watched females preening on a twig less than six feet distant, but did not see a male thus engaged.

Ordinarily the Black-chins, of which a few haunted the same locality, would drive the Calliope unmercifully. Once, however, a male Calliope shot close beside me up the hillside, just grazing the grass-tips, driving at a Black-chin that was quietly feeding. Within two feet of the latter he mounted vertically about thirty feet, then dropped like a plummet on the feeding bird, and both flashed down the hill-side with Calliope doing the chasing.

The courting antics of the species likewise received close attention. On one occasion an angry buzzing, almost terrifying in volume, resolved itself into a pair of these birds holding to each other's beaks and revolving like a horizontal pinwheel, *less than four feet from my eyes*. Around they went, a half-dozen times, then parted, the female perching and preening on a twig of the oak-scrub just beyond arm's reach, with the male two feet farther away and giving vent at three-second intervals to an explosive, metallic *tzing*. This was, of course, made with the wings, but the bird was sufficiently screened so that I could not see it clearly.

On another occasion a female sat preening on a horizontal dead weed, when a male shot up the hill-side close to the ground, passed the female, mounted about twenty-five feet and darted down again in a long, narrow, vertical ellipse that flattened where it touched the hill-side. As he passed the female she fluttered and swung head downward on her perch. The male alighted above her, with vibrating wings, and cotton took place in this position.

Of seven females taken, one secured on June 19 held a half-developed ovum; two others, taken on this date and two days later, showed slightly developed ova, and the others were still farther from the laying stage. Other females were observed on June 23 and 24 gathering spider-webs about the cabins.—L. E. WYMAN, *Museum of History, Science and Art, Los Angeles, October 2, 1920.*

EDITORIAL NOTES AND NEWS

Honorary membership in the Cooper Ornithological Club has, by action of both Divisions, been conferred upon Florence Merriam Bailey (Mrs. Vernon Bailey). This recognition is based upon Mrs. Bailey's record as an accurate observer of living birds, and upon her marked literary ability in putting into permanent and pleasing form much of high value relative to the life histories of the birds of the western United States. She became an Active member of the Club in 1910 and a Life member in 1919. She has always been a loyal supporter of the purposes of the Club, for instance as evidenced by the numerous articles contributed by her to THE CONDOR.

The present Honorary membership roll of the Cooper Club contains seven names: Robert Ridgway, elected in 1905; Henry W. Henshaw, 1909; C. Hart Merriam, 1909; J. A. Allen, 1910; Frank Stephens, 1912; Edward W. Nelson, 1917; and Florence Merriam Bailey, 1920. Each of these ornithologists has been identified importantly with the development of the ornithology of western North America.

The W. Otto Emerson collection of bird skins, numbering about 5500, has been purchased for the California Academy of Sciences by two public-spirited members of that body, Messrs. John W. Mailliard and W. H. Crocker. This collection consists largely of birds gathered by Mr. Emerson himself during the past forty years in Alameda County, California. Its local value is therefore great, and it is gratifying that its permanent preservation is now assured in a place to which bird students in the San Francisco Bay region can have easy access. A number of rarities are included, such as "record specimens" of species which have been obtained but once or twice on the Pacific Coast or in California. There also goes into the possession of the Academy of Sciences the original manuscript of Cooper's *Ornithology of California* (1870), and that of Cooper's *Birds of Washington Territory* (1860). These had been salvaged from the effects of Dr. Cooper by Mr. Emerson many years ago, shortly after the former's death.

The large reading public reached by the "International Feature Service" through the

Sunday supplements of many newspapers is served from time to time with highly-seasoned half-portions of natural history, stimulative to the imagination perhaps, but not often over full of nutriment in the way of truth or fact. Here is a "rich" sample of ornithology which appeared recently under the authorship of "Dr. W. H. Ballou":

"All migrating water birds, so far as we know, carry safely beneath their feathers little conch shelled animals for food in flight. Without pausing, by a slight twist of the head which shall not upset the centre of gravity, the bird swipes a shell or two when hungry instead of alighting for a table d'hôte dinner. Of all fliers, the upland plover loads itself with the largest number of shells, making probably the longest and most sustained migrations of all water-wading birds."

MINUTES OF COOPER CLUB MEETINGS

NORTHERN DIVISION

SEPTEMBER.—The regular meeting of the Northern Division of the Cooper Club was held at the Museum of Vertebrate Zoology, September 23, at 8 P. M. President Wright presided, and the following members were present: Mesdames Allen, Ames, Baird, Bamford, Bridges, Ferguson, E. Ferguson, Griffin, Grinnell, Kibbe, Law, McLellan, Mead, Neilson, Neugass, Newhall, Randolph, Rush, and Thomson; Messrs. Bell, Cooper, Cox, Davies, Dixon, Elmore, Evermann, Gignoux, Grinnell, Hill, Kibbe, Law, McLean, Storer, Wheeler, and Wright. Among the visitors were Mr. Baird, Miss Beaman, Mrs. Etcheverry, and Mrs. Wheeler.

The minutes of the August meeting were read and approved and were followed by the reading of the minutes of the August meeting of the Southern Division. Miss Eleanor Bennet, Mrs. Edward Hohfeld, and Mr. Arthur Frank were elected to membership and elections by the Southern Division in August were approved. New names proposed were Francis G. Gilchrist, Berkeley, by Tracy I. Storer, and Mrs. Georgianna T. Roe, Berkeley, by Mrs. Eva D. Roe. A communication from the Federal Power Commission, Washington, D. C., outlined its policy "not to entertain or consider any application for use of water-power sites in any National Park."

Business completed, vacation reports were given. Mrs. Kibbe, who walked with her husband through Glacier Park, had familiar interviews with crossbills, pipits, rosy finches, and other interesting species. Mr. Law spoke of the nest of the Cassin

Vireo and the miniature thrasher-like song of the Gnatcatcher. Dr. Evermann gave an account of his trip to the Hawaiian Islands, dwelling upon his impressions on visiting Mount Kilauea. Adjourned.—AMELIA S. ALLEN, *Secretary*.

SOUTHERN DIVISION

SEPTEMBER 26, 1920.—The regular monthly meeting of the Southern Division, Cooper Ornithological Club, was held at the home of President Miller, on the banks of the Arroyo Seco, at 3:00 P. M. An attendance of thirty members and fifteen visitors attested the popularity of the occasion.

Minutes of the August meeting were read and approved. Applicants whose names were presented at that meeting were declared elected, on motion of Dr. Esterly, seconded by Dr. Rich, that the secretary be instructed to cast a favoring ballot. New presentations were as follows: Miss Romola M. Adams, Long Beach, by Miss Drachman; Mrs. Edna R. Warmer, Los Angeles, by Dr. Charles Warmer; Miss Alice Rose Livesey, Glendale, by Dr. Miller; Miss Lorene Fritch, Glendale, also by Dr. Miller; William V. Evans, Livingston, Montana, by W. Lee Chambers; Mrs. Herbert Clayburgh, Redwood City, by Mrs. Mervyn Neugass; Miss Catherine V. Beers, University of Southern California, by L. E. Wyman. The Northern Division sent the names of Eleanor V. Bennet, Mrs. Edward Hohfeld, and Arthur Frank.

A proposal to elect Florence Merriam Bailey to honorary membership, following favorable action by the Northern Division, was presented. Mr. Chambers moved that the action of that division be ratified; seconded by Mrs. Fargo, and carried unanimously.

Mr. Dawson was called upon to speak relative to the status of the forthcoming "Birds of California", and brought the good word that this long-delayed publication will soon go to press. Other members contributing brief accounts of recent observations or interesting experiences were Mr. Frank Stephens, Sidney Peyton, Wright Pierce, Miss Mary Mann Miller, Miss Pratt, and Dr. Miller.

Serious business completed, members and friends partook of watermelon and fruit, and congratulated one another and their genial host upon the complete success of the occasion. Adjourned.—L. E. WYMAN, *Secretary*.

INDEX TO VOLUME XXII

A

- Acanthis hornemanni exillipes, 183
 linaria holboellii, 183
 linaria linaria, 183
 Acanthopneuste borealis kennicotti, 185
 Accipiter cooperi, 172
 Actitis macularia, 31, 39, 178
 Aechmophorus occidentalis, 19
 Aegialitis semipalmata, 31, 178
 Aeronautes melanoleucus, 198
 Aethia cristatella, 175
 pusilla, 175
 Aimophila ruficeps ruficeps, 154
 Aix sponsa, 77
 Alcidae, 118
 Allen, Amelia S., the Rusty Song Sparrow in Berkeley, and the return of winter birds, 16; Red Crossbills at Berkeley, California, 73
 Ammodramus caudacutus nelsoni, 9
 Amphispiza bilineata deserticola, 171
 Anas platyrhynchos, 36, 175, 176
 Anhinga, American, 20
 Anhinga anhinga, 20
 Anser albifrons gambeli, 178
 Anthus rubescens, 175, 185
 Antrostomus vociferus macromystax, 62
 Aphelocoma insularis, 7
 woodhousei, 79
 Apriza virgata, 31
 Aquila chrysaetos, 38, 72
 Archilochus alexandri, 171
 Ardea herodias treganzai, 168
 Arenaria interpres morinella, 31
 melanocephala, 32
 Arquatella maritima couesi, 29
 maritima ptilocnemis, 175
 Astragalinus psaltria, 172
 Astur atricapillus atricapillus, 79, 180
 atricapillus striatulus, 33
 Asyndesmus lewisi, 42
 Auk, Great, 45
 Auklet, Crested, 51
 Least, 51
 Paroquet, 51
 Rhinceros, 40
 Avocet, 28

B

- Baeolophus inornatus griseus, 6, 80
 Bailey, Florence Merriam, a return to the Dakota Lake region (continued), 21, 66, 103

- Bailey, Harold H., Bryant Marsh Sparrow in the hills, 188
 Baldpate, 177
 Baldwin, S. Prentiss, a review of his "bird banding by means of systematic trapping", 114
 Bancroft, Griffing, the Harris Hawk a breeder in California, 156; some nesting habits of the Pied-billed Grebe, 206
 Bartramia longicauda, 30
 Bassett, Frank N., the Anna Hummingbird as a flycatcher, 37; variations in the song of the Golden-crowned Sparrow, 136; the Yellow-headed Blackbird flocking with Brewer Blackbirds, 205
 Bent, Arthur Cleveland, review of his "life histories of North American diving birds—order Pygopodes", 45
 Bird, Cedar, 72, 110
 Bittern, 69, 168
 Sun, 169
 Blackbird, 22
 Bicolored, 135
 Brewer, 38, 102, 104, 152, 205
 California Brewer, 153
 Red-winged, 69, 104
 Rusty, 182
 Tri-colored, 163
 Yellow-headed, 22, 23, 104, 205
 Bluebird, 166
 Mountain, 187
 Bobolink, 103
 Bombycilla cedrorum, 74, 110, 154, 159
 garrula, 33, 72, 80, 110, -159, 184
 Bonasa umbellus yukonensis, 179
 Botaurus lentiginosus, 168
 Bowles, J. Hooper, and Van Rossem, A. J., nesting of the Dusky Poor-will near Saugus, Los Angeles County, California, 61
 Bowles, J. H., the Eastern Savannah Sparrow and the Aleutian Savannah Sparrow at Tacoma, Washington, 108
 Brant, Black, 60, 134
 Branta canadensis canadensis, 78
 canadensis hutchinsii, 178
 Brooks, Allan, notes on the Limicolae of southern British Columbia, 26
 Bryant, Harold C., Edward Garner, a pioneer naturalist, 32
 Bubo virginianus lagophonous, 40, 181
 Bufflehead, 177

Bunting, Beautiful, 135

Lazuli, 172

Snow, 183

Burleigh, T. D., Eastern Fox Sparrow at
Seattle, 205; the Orange-crowned
Warbler a possible winter resident at
Seattle; Washington, 206

Bush-tit, 74

Buteo borealis calurus, 79

C

Calcarius lapponicus alasensis, 175*Calidris leucophaea*, 30, 41*Calothorax lucifer*, 6*Calypte anna*, 37, 109

costae, 190

Canachites canadensis osgoodi, 178

Canvasback, 21, 69

Carpodacus purpureus californicus, 78

Catbird, 69

Catherpes mexicanus conspersus, 80*Catoptrophorus semipalmatus inornatus*, 30

Cedar Bird, 72, 110

Cerorhinca monocerata, 40*Certhia familiaris occidentalis*, 158

familiaris zelotes, 158

Chaemepelia passerina pallescens, 154*Chaetura acuta*, 198

cinereiventris, 198

gaumeri, 198

leucopygialis, 198

pelagica, 43, 197, 198

poliura, 198

richmondi, 198

stictilaema, 198

vauxi, 198

Chamaea fasciata henshawi, 7

Chambliss Library, catalogue of, 195

Charadrius dominicus dominicus, 31

dominicus fulvus, 31

Charitonetta albeola, 177

Chat, Long-tailed, 172

Chaulelasmus streperus, 174*Chen caerulescens*, 76

Chewink, 67

Chickadee, Bailey Mountain, 111

Hudsonian, 185

Mountain, 74, 78, 80, 111, 166

Yukon, 185

Chicken, 178

Prairie, 21, 157

Clangula clangula americana, 177*Colaptes auratus*, 13

auratus borealis, 182

cafer collaris, 79, 188

Collocalia bartschi, 198

dodgii, 198

esculenta, 198

francica germani, 198*francica inexpectata*, 198*francica townsendi*, 198*fuciphaga amella*, 198*fuciphaga fuciphaga*, 198*fuciphaga unicolor*, 198*fuciphaga vanikorensis*, 198

innominata, 198

inopina, 198

linchi affinis, 198*linchi elachyptera*, 198*linchi isonota*, 198*linchi oberholseri*, 198

lowi lowi, 198

lowi palawanensis, 198

marginata, 198

ocista, 198

origenis, 198

thespesia, 198

troglodytes, 198

vestita aenigma, 198*vestita elaphra*, 198*vestita mearnsi*, 198*vestita vestita*, 198*Columba fasciata*, 160*Colymbus auritus*, 19, 40

holboellii, 19, 176

nigricollis californicus, 19

Condor, California, 8, 134

Cooper Club, directory of members, 118

minutes of, 46, 82, 115, 162, 192, 208

Coot, 69, 72, 105

Cormorant, Baird, 59

Brandt, 41

Pelagic, 139

Corvus corax principalis, 174, 182*Coturnicops noveboracensis*, 33

Cowbird, 37

Dwarf, 159

Crane, Little Brown, 174, 178

Sandhill, 67

Creeper, Sierra, 158

Tawny, 158

Crossbill, 159, 188

Red, 73

Sierra Red, 78

Sitka, 139

White-winged, 139, 183

Crow, 23, 45, 68, 69, 70, 71, 104

Clarke, 39, 160

Cryptoglaux acadica, 33

acadica acadica, 40

Cuckoo, 13

Curlew, Hudsonian, 31

Least, 27

Long-billed, 31

Cyanocephalus cyanocephalus, 36, 38, 79*Cyanocitta stelleri diademata*, 79

stelleri frontalis, 74, 78, 188, 190

Cypseloides brunnelltorques, 198

cherriei, 198

D

- Dafila acuta*, 177
 Daggett, Frank S., necrology, 112
 Dawson, W. Leon, communication, 193
Dendroica coronata hooveri, 184
Dice, Lee Raymond, notes on some birds of interior Alaska, 176
 Dixon, J., nesting of the Olive-sided Flycatcher in Berkeley, California, 200
 Dove, Mexican, 140
 Mexican Ground, 154
 Mourning, 13, 36, 69, 114, 141, 155, 160
 Sonora, 140
 White-winged, 140, 146, 190
 Dowitzher, Long-billed, 28, 173
DuBois, Alexander D., a feeding habit of the Cedar Waxwing, 154
Duck, American Scaup, 134
 Fulvous Tree, 135
 Harlequin, 178
 Old Squaw, 43, 177
 Ruddy, 25
 Wood, 77
Dryobates arizonae, 6
 pubescens nelsoni, 181
 scalaris cactophilus, 79
 villosus leucothorectis, 79
 villosus septentrionalis, 181

E

- Eagle, Bald, 38, 110
 Golden, 38, 72
 Northern Bald, 110, 204
 Southern Bald, 110, 156
 Editorial notes and news, 44, 81, 112, 161, 191, 207
Egretta candidissima, 168
Elanus leucurus, 80
Empidonax griseus, 37
 hammondi, 190
Eremophila alpestris strigata, 56
Ereunetes mauri, 30
 pusillus, 29
 Esterly, C. O., Clarke Nutcracker on the Colorado Desert, 40; a plague of Rufous-crowned Sparrows, 154
Euphagus carolinus, 182
 cyaniceps, 153, 205
 minusculus, 153

F

- Falco columbarius columbarius*, 181
 peregrinus anatum, 181
 richardsoni, 135
 Ferris, G. F., Clarke Nutcracker at sea, 39

- Finch, California Purple, 78
 Cassin Purple, 92, 166
 House, 189
 Purple, 74
 Sharp-tailed, 9
 Fisher, W. K., the Clarke Nutcracker at Point Pinos, Monterey County, California, 36
 Fleming, J. H., the Northern Bald Eagle a probable California bird, 110
 Flicker, 11, 16, 69, 74
 Boreal, 182
 Red-shafted, 79, 188
Flycatcher, Ash-throated, 189
 Hammond, 190
 Olive-sided, 182, 200
 Yellow-bellied, 6
 Fortner, John C., winter nesting of the Ground Dove, 154; Clarke Nutcracker and White-winged Dove in Southern California, 190
Fratercula corniculata, 175
Frogmouth, 170
Fulmar, Pacific, 40, 41
Fulmarus glacialis glupischa, 40, 41
 rodgersi, 175

G

- Gadwall, 174
Gallinago delicata, 28, 178
Gavia stellata, 176
Geothlypis trichas scirpicola, 187
 Gignoux, C., note on the nesting habits of the Osprey in Yellowstone Park, 205
 Gnatcatcher, Western, 79
 Godwit, Marbled, 30
 Golden-eye, American, 134, 177
 Goldfinch, 69
 Arkansas, 172
 Green-backed, 74, 189
 Willow, 74
 Goose, Blue, 76, 82
 Canada, 37, 107
 Hutchins, 178
 Lesser Snow, 76
 Snow, 106
 White-fronted, 178
 Goshawk, American, 135, 180
 Eastern, 79
 Western, 33
 Grebe, Eared, 20, 69, 72
 Holboell, 20, 103, 175
 Horned, 40, 69
 Pied-billed, 20, 69, 206
 Grinnell, J., the Blue Goose as a bird of California, 76; the existence of sea birds a relatively safe one, 101; Dusky Warbler at Berkeley, California, 112;

- the California race of the Brewer
Blackbird, 152
Grosbeak, Alaska Pine, 183
Black-headed, 43, 171
Evening, 78
Western Blue, 43
Western Evening, 111
Grouse, Alaska Spruce, 178
Sharp-tailed, 180
Yukon Ruffed, 179
Grus canadensis, 174, 178
Guillemot, Pigeon, 101, 139
Guiraca caerulea lazula, 43
Gull, Bonaparte, 139, 176
California, 40
Franklin, 21, 22, 69, 105
Glaucous, 176
Glaucous-winged, 41, 73, 157
Herring, 41
Ring-billed, 40, 41
Sabine, 139
Short-billed, 40, 41, 73, 176
Slaty-backed, 175
Western, 40, 41

H

- Haematopus bachmani*, 32
Haliaeetus leucocephalus alascanus, 110
leucocephalus leucocephalus, 110, 156, 205
Hanna, G. Dallas, new and interesting records of Pribilof Island birds, 173
Harelda hyemalis, 43, 175, 177
Hawk, Cooper, 172
Duck, 69, 102, 181
Harris, 156
Marsh, 69, 72, 104
Pigeon, 181
Ptarmigan, 181
Red-tailed, 103
Rough-legged, 180
Sparrow, 33, 44
Swainson, 180
Heath, Harold, the nesting habits of the Alaska Wren, 49
Hedymeles melanocephalus papago, 43
Heleodytes brunneicapillus couesi, 159
Helodromas solitarius cinnamomeus, 30, 178
solitarius solitarius, 30
Hen, Spruce, 179
Henderson, H. C., Black and White Warbler at Carpenteria, California, 76
Henderson, Junius, migrations of the Pinyon Jay in Colorado, 36; further Colorado notes, 42; the Varied Thrush in Wyoming, 75
Henshaw, Henry Wetherbee, autobiographical notes (continued), 3, 55, 85
Heron, Black-crowned Night, 69, 159, 168
Great Blue, 168
Night, 22, 105
Snowy, 168
Hersey, F. S., the probable breeding of the Aleutian Tern in southeastern Alaska—a query, 203
Hesperiphona vespertina montana, 78, 111
Heteractitis brevipes, 174
incana, 30
Hirundapus caudacutus, 198
celebensis, 198
giganteus, 198
Hirundo erythrogaster, 184
Histrionicus histrionicus, 178
Hoffman, Ralph, a large flock of Swans wintering at Santa Barbara, 77; notes on some birds of Santa Cruz Island, California, 187
Hollister, N., segregation of male Mallards, 36
Howell, A. B., habits of *Oceanodroma leucorhoa beall* versus *O. socorroensis*, 41; the Wood Ibis as a winter visitant to California, 75; is the Swan increasing in numbers, 77
Hubbard, Ralph, Colorado notes, 37
Hudson, L. W., Golden Eagle at Porterville, California, 72; an albino Brown Towhee, 80
Huey, Laurence M., two birds new to the Lower Colorado River region, 73
Hummingbird, Anna, 37, 74, 109, 158, 189
Black-chinned, 171, 207
Broad-billed, 6
Calliope, 206
Costa, 190
Slender-tailed, 6
Hunt, Chreswell J., sunlight and shadow, 186
Hunt, Richard, nuptial flight of the Anna Hummingbird, 109; how fast can a Roadrunner run, 186; an Ovenbird on the Mohave Desert, 190
Hylocichla aliciae aliciae, 185
fuscescens salicicola, 6
guttata guttata, 187
guttata nanus, 138
mustelina, 43
ustulata oedica, 7
ustulata swainsoni, 185
ustulata ustulata, 38, 138

I

- Iache latirostris*, 6
Ibis, Wood, 75, 135
Icteria virens longicauda, 172
Irving, Frank N., importance of the blind in bird photography, 10

Ixoreus, 138

- naevius meruloides, 75, 185
- naevius naevius, 75

J**Jack-snipe, European, 173****Jay, Alaskan, 182**

- Blue, 114
- Blue-fronted, 78, 111, 188, 190
- California, 73, 74
- Crested, 74
- Island, 7
- Long-crested, 79
- Oregon, 48
- Pinyon, 36, 38, 79
- Woodhouse, 79

Junco, 4, 67, 105, 110

- Pink-sided, 165
- Shufeldt, 80
- Sierra, 158
- Slate-colored, 80, 161, 184

Junco cinereus palliatus, 6

- connectens, 166
- hyemalis hyemalis, 80, 161, 184
- hyemalis mearnsi, 165
- montanus, 166
- oreganus shufeldti, 80

K**Kagu, 169****Kelly, Mrs. G. Earle, Black-crowned Night Heron gathering nesting material, 159****Killdeer, 31, 69****Kingfisher, 104****Western Belted, 181****Kinglet, Golden-crowned, 78****Ruby-crowned, 158, 166, 185****Kite, White-tailed, 80****Kittiwake, 51****Pacific, 41****Knot, 29****L****Lagopus lagopus lagopus, 179**

- leucurus altipetens, 150
- leucurus leucurus, 146
- leucurus peninsularis, 148
- leucurus rainierensis, 146
- rupestris rupestris, 180

Lanius borealis invictus, 184**Lark, Horned, 34, 166****Island Shore, 7****Pallid Horned, 182****Prairie Horned, 56****Shore, 55****Larus argentatus, 41**

- brachyrhynchus, 40, 41, 60, 73, 176
- californicus, 40
- delawarensis, 40, 41
- glaucescens, 41, 73, 175
- hyperboreus, 175, 176
- occidentalis, 40, 41
- philadelphia, 176

Lee, Melicent Humason, notes on a few birds of the Grand Canyon, Arizona, 171**Leopold, Aldo, range of the Magpie in New Mexico, 112; further notes on differential sex migration, 156****Leptostoma, 170****Leucosticte, 166****Dawson, 78****Gray-crowned, 134****Leucosticte griseonucha, 175****tephrocotis dawsoni, 78****Limnocryptes gallinula, 173****Limosa fedoa, 30****Linnet, 74, 159****Little, Luther, a peculiar Flicker habit, 188; nesting of the Blue-fronted Jay in South Pasadena, 190****Lobipes lobatus, 28, 178****Loon, Pacific, 139****Red-throated, 176****Lophodytes cucullatus, 33, 73****Loxia curvirostra bendirei, 78, 159****leucoptera, 183****Lunda cirrhata, 41, 175****M****Macrorhamphus griseus griseus, 29****griseus scolopaceus, 28, 173****Magpie, 112, 182****Mailliard, Joseph, birds returning to their old haunts, 38; effects of a storm on the bird life of the sea, 40; Lincoln Sparrow in San Francisco, 43; Calaveras Warbler in San Benito County, California, 155; a correction concerning the Tawny Creeper, 158; notes on Nutcrackers in Monterey County, California, 160.****Mailliard, Joseph and John W., Bryant Marsh Sparrow upon the hills, 63****Mallard, 22, 36, 68, 72, 105, 157, 176****Mareca americana, 158, 177****penelope, 158****Marila, 177****Meadowlark, 69, 107****Mearnsia picina, 198****Meleagris gallopavo merriami, 6****Melopella asiatica mearnsi, 140****asiatica trudeauli, 190**

Melospiza lincolni lincolni, 43, 184
melodia rufina, 16, 156
Merganser, American, 36, 138
 Hooded, 33, 73
Mergus americanus, 138
Mesite, 169
Micropalama himantopus, 29
Micropus aequatorialis, 198
 affinis, 198
 andicola, 198
 apus, 198
 horus, 198
 melba, 198
 myoptilus, 198
 pacificus, 198
 subfurcatus, 198
 Miller, Loye, unusual conditions for southern California, 78; notes from the region of Lake Tahoe, 78
 Miller, Mary Mann, Blue-fronted Jay nesting in Los Angeles, California, 188
Mniotilta varia, 76
 Mockingbird, 13, 38, 74, 189
Molothrus ater obscurus, 159
Morphnus daggetti, 132
 Mudhen, 102
 Murre, 51, 157
 California, 40, 41
 Pallas, 115
 Murrelet, Ancient, 204
 Marbled, 139
Mycteria americana, 75
 Myers, Harriet Williams, unusual birds of my garden, 74
Myiodynastes luteiventris, 6

N

Nannus alascensis, 175
 trogodytes alascensis, 49
 Nelson, E. W., bird banding work being taken over by the Biological Survey, 113
Nephoecetes niger, 198
Nettion carolinense, 174, 175, 177
 crecca, 174
 Nighthawk, 69, 104
Nucifraga columbiana, 36, 39, 40, 41, 79, 160, 187, 190
Numenius americanus, 31
 hudsonicus, 31
 Nutcracker, Clarke, 36, 39, 40, 41, 79, 160, 187, 190
 Nuthatch Pigmy, 80
 Red-breasted 78, 111, 188
 Rocky Mountain, 80, 166, 167
 Slender-billed, 74, 111
 White-breasted, 67, 69
Nuttallornis borealis, 182, 200

Nycticorax nycticorax naevius, 159, 168
Nyctidromas albigollis merrilli, 61

O

Oberholser, Harry C., description of a new *Otocoris* from California, 34; *Emplidonax griseus* in Oregon, 37; *Bubo virginianus lagophonus* in North Dakota, 40; some bird notes from Nebraska, 43; review of his "a revision of the subspecies of *Passerculus rustratus* (Cassin)", 81
Oceanodroma furcata, 42
 leucorhoa beali, 41
 socorroensis, 41
Oldemia deglandi, 41
 perspicillata, 178
 Old-squaw, 177
Olor buccinator, 72
 columbianus, 77, 160, 178
Oporornis agilis, 158
 philadelphia, 158
 Oriole, Arizona Hooded, 189
 Bullock, 42
 Osprey, 181, 205
Otocoris alpestris actia, 35
 alpestris arcticola, 182
 alpestris arenicola, 6
 alpestris insularis, 7, 34
 alpestris merrilli, 34
 alpestris rubea, 34
 alpestris sierrae, 34, 35
 alpestris strigata, 34
Otus flammeolus, 33
 Ovenbird, 190
 Owl, Acadian, 40
 Barn, 42
 Flammulated Screech, 33
 Great Gray, 33, 181
 Hawk, 181
 Horned, 82
 Northwestern Horned, 40, 181
 Saw-whet, 33, 40
 Spotted, 135
Oxyechus vociferus, 31
 Oystercatcher, Black, 32

P

Palmer, T. S., authors' names in the second Condor index, 188
Pandion haliaetus carolinensis, 181, 205
Panyptila cayanaensis, 198
 sanctihieronymi, 198
Parabuteo unicinctus harrisi, 156
 Parauque, Merrill, 61
 Parrot, 170
 Partridge, Massena, 6

- Passer domesticus*, 80
Passerculus rostratus guttatus, 81
 rostratus halophilus, 81
 rostratus rostratus, 81
 sanctorum, 84
 sandwichensis alaudinus, 63, 109, 183
 sandwichensis brooksi, 108
 sandwichensis bryanti, 63, 188
 sandwichensis nevadensis, 109
 sandwichensis sandwichensis, 108, 139
 sandwichensis savanna, 108
Passerella iliaca iliaca, 184, 205
 iliaca meruloides, 16
 iliaca townsendi, 139
 iliaca unalaschcensis, 173
Passerina amoena, 172
Pedioecetes phasianellus phasianellus, 180
Pelican, Brown, 60
 California Brown, 41
 White, 70, 104
Pelecanus californicus, 41
Pelidna alpina alpina, 29
 alpina sakhalina, 29
Penthestes atricapillus turneri, 185
 gambell baileyae, 78, 111
 gambell gambell, 80
 hudsonicus hudsonicus, 185
Perisoreus canadensis fumifrons, 182
Petrel, 48
 Fork-tailed, 101
 Socorro, 42
Petrochelidon lunifrons lunifrons, 184
Pewee, Western Wood, 167
Phainopepla, 74
Phainopepla nitens, 74
Phalacrocorax pelagicus resplendens, 59
 penicillatus, 41
 urile, 175
Phalaenoptilus nuttalli californicus, 61
Phalarope, Northern, 28, 139, 178
 Red, 28
 Wilson, 22, 25, 28
Phalaropus fulicarius, 28
 lobatus, 175
Phalaris psittacula, 175
Phasianus torquatus, 187
Pheasant, Ring-necked, 187
Phoebe, Black, 74, 189
 Say, 33, 43
Pica pica hudsonia, 112, 182
Picoides americanus fasciatus, 182
 arcticus, 182
Pierce, Wright M., Saw-whet Owl from the San Bernardino Mountains, California, 40; a new bird for the Pacific slope of southern California, 110; another Rusty Song Sparrow from southern California, 156
Pigeon, Band-tailed, 160
 Scaled, 143
 White-headed, 143
Pinicola enucleator alascensis, 183
Pintail, 177
Pipilo crissalis carolae, 80
Pipit, 175, 185
Piranga ludoviciana, 161
 rubra rubra, 78
Pisobia aurita, 29
 bairdi, 29
 maculata, 29
 minutilla, 29, 178
Planesticus migratorius migratorius, 185
 migratorius propinquus, 39, 74, 80, 175
Plectrophenax nivalis nivalis, 183
 nivalis townsendi, 175
Plover, 56
 American Golden, 31
 Asiatic Golden, 27
 Black-bellied, 31
 Pacific Golden, 31
 Semipalmated, 31, 104, 178
 Upland, 30
Podilymbus podiceps, 19, 206
Polioptila caerulea obscura, 79
Poor-will, Dusky, 61
Potoo, 170
Ptarmigan, Rainier White-tailed, 146
 Rock, 180
 Willow, 113, 179
Puffin, 51
 Atlantic, 45
 Horned, 103
 Tufted, 41
Puffinus griseus, 41, 138
 newelli, 96
 tenuirostris, 138

Q

Quail, California, 102
 Mountain, 33
 Valley, 74, 187

R

Rail, Clapper, 13
 King, 13
 Sora, 69
 Yellow, 33
Raven, 6
 Northern, 174, 182
Recurvirostra americana, 28
Redpoll, 183
 Hoary, 183
 Holboell, 183
Redtail, Western, 79
Redwing, 23, 37, 142

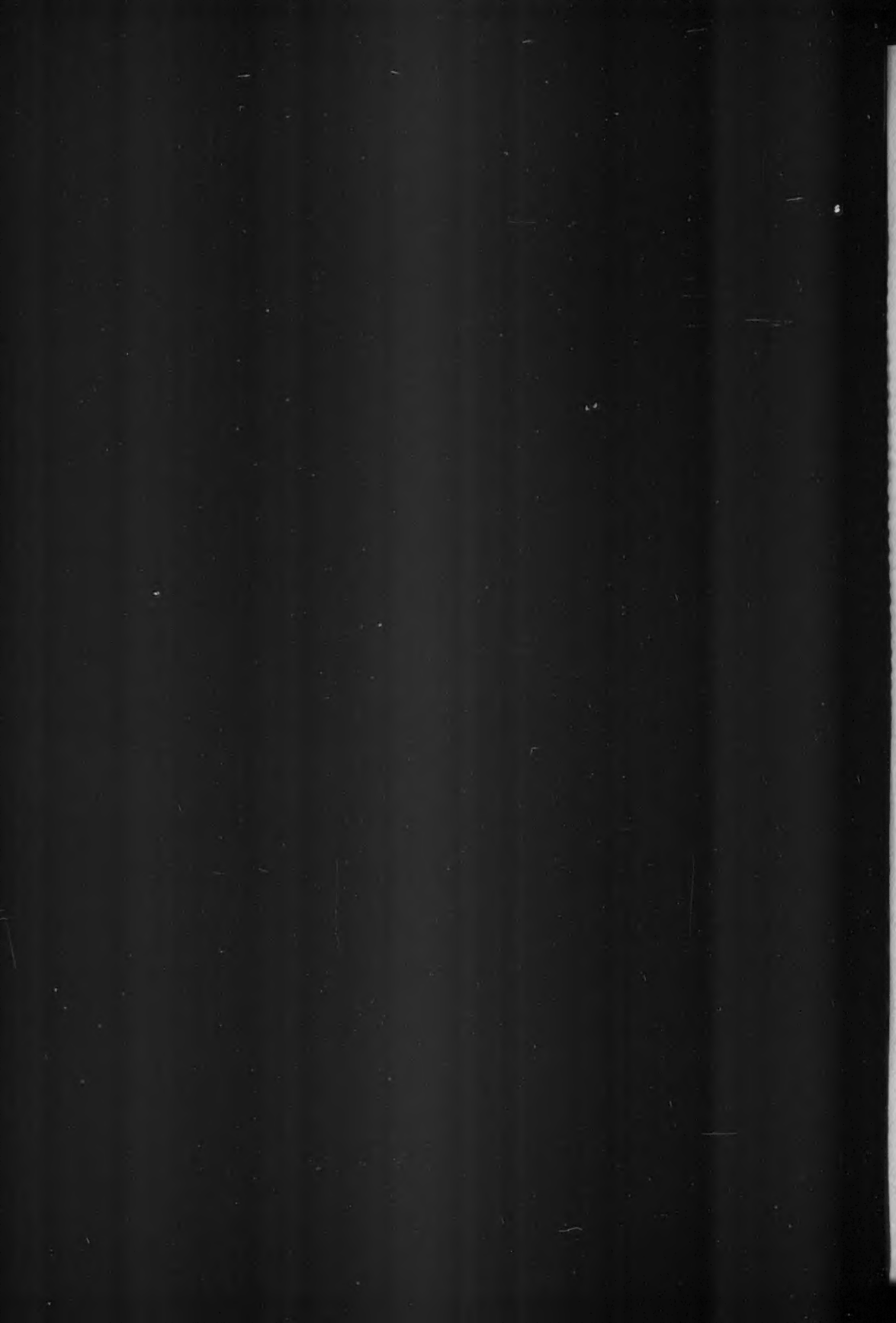
- Regulus calendula calendula*, 185
satrapa olivaceus, 78
Riparia riparia, 184
Rissa brevirostris, 175
tridactyla pollicaris, 41, 175
 Roadrunner, 186
 Robin, 13, 38, 43, 105, 166
 Eastern, 185
 Western, 39, 74, 80, 175
 Rust, Henry J., the home life of the Western Warbling Vireo, 85

S

- Salpinctes obsoletus obsoletus*, 80, 171
 Sanderling, 30, 41
 Sandpiper, Aleutian, 27, 29
 Baird, 29
 Buff-breasted, 27, 31
 Eastern Solitary, 27
 Least, 28, 29, 104, 178
 Pectoral, 29
 Red-backed, 29
 Semipalmated, 26, 29
 Sharp-tailed, 27, 29
 Solitary, 30
 Spotted, 31, 39, 178
 Stilt, 26, 29
 Temminck, 27
 Terek, 27
 Thick-billed, 27
 Western, 30
 Western Solitary, 30, 178
 Sapsucker, Red-breasted, 158
 Williamson, 4
Saxicola oenanthe oenanthe, 185
Sayornis sayus, 33, 43
 Scaup, 177
 Schlesinger, Jane L., Clarke Nutcracker at Carmel, 41; Western Evening Grosbeak in the San Francisco Bay region, 111
Scolecophagus cyanocephalus, 152
 Scoter, Surf, 178
 White-winged, 41
Scotiaptex nebulosa nebulosa, 33, 181
 Scott, Carroll DeWilton, domesticating California birds, 189
Selurus aurocapillus, 191
 noveboracensis notabilis, 184
Selasphorus alleni, 9
 Sharp, C. S., notes from Escondido, California, 159
 Shearwater, Slender-billed, 138
 Sooty, 41
 Shoveller, 69, 105
 Shrike, 114
 California, 189
 Northern, 166, 184
Sialia currucoides, 187
 Siskin, Pine, 80, 166
Sitta canadensis, 78, 111
 carolinensis aculeata, 74
 carolinensis nelsoni, 80
 pygmaea pygmaea, 80
 Skinner, M. P., Trumpeter Swan breeding in Yellowstone Park, 72; the Pink-sided Junco, 165
 Snipe, 104
 European Jack, 173
 Wilson, 28, 36, 178
 Solitaire, Townsend, 111, 166
 Sparrow, Aleutian Savannah, 108, 139
 Black-throated, 135
 Brooks Savannah, 108
 Bryant Marsh, 63, 188
 Chipping, 74, 110, 114, 166
 Desert, 171
 Eastern Fox, 205
 Eastern Savannah, 108
 English, 42, 74, 80, 99, 114
 Fox, 110, 156, 184
 Gambel, 74, 183
 Golden-crowned, 16, 136, 139, 154
 Harris, 135
 Large-billed, 81
 Lincoln, 43, 184
 Nevada Savannah, 109
 Nuttall, 39
 Rufous-crowned, 154
 Rusty Song, 16, 18, 156
 Santa Cruz Song, 16
 Shumagin Fox, 173
 Song, 22, 74, 107, 114, 167
 Townsend, 139
 Tree, 166
 Vesper, 69, 166
 Western Field, 43
 Western Savannah, 63, 109, 183
 Western Tree, 183
 White-crowned, 105, 114, 154, 166
 White-throated, 114, 115
 Yakutat Fox, 16
Sphyrapicus varius daggetti, 133, 158
Spinus pinus, 80
Spizella monticola ochracea, 183
 pusilla arenacea, 43
Squatarola squatarola, 31
Steganopus tricolor, 28
Stellula calliope, 206
 Stephens, Frank, Old Squaw Ducks at San Diego, 43; a swan hunt, 77; Bohemian Waxwing in San Diego County, 159
Sterna aleutica, 111, 203
 paradisaea, 72, 111, 135, 176, 203
 Storer, Tracy I., review of Bent's "life histories of North American diving birds—order Pygopodes", 45; review of Baldwin's "bird banding by means of

- systematic trapping", 114; Bald Eagle at Wawona, 156; lizard eaten by Cactus Wren, 159; Western Tanager in Santa Cruz mountains in summer, 161
- Stork, Whale-headed, 169
- Streptoceryle alcyon caurina, 181
- Streptoprocne semicollaris, 198
zonaris, 198
- Surf-bird, 31
- Surnia ulula caparoch, 181
- Swallow, 105
Bank, 67, 184
Barn, 22, 25, 67, 69, 104, 184
Cliff, 184, 189
White-bellied, 23
Wood, 170
- Swan, Trumpeter, 72
Whistling, 77, 131, 135, 160, 178
- Swarth, H. S., Bohemian Waxwing in southeastern California, 72; gulls following a train, 75; review of Oberholser's "a revision of the subspecies of Passerculus rostratus (Cassin)", 81; in memoriam: Frank Slater Daggett, 129
- Swarth, H. S., and Winifern W., some winter birds at the Grand Canyon, Arizona, 79
- Swift, Chimney, 43
- Synthliboramphus antiquus, 204
- T**
- Tachornis infumatus, 198
phoenicobius, 198
- Tachynautes parvus, 198
- Tanager, Summer, 78
Western, 161
- Tattler, Polynesian, 174
Wandering, 30, 175
- Taylor, Mrs. H. J., habits of a Red-breasted Sapsucker, 158
- Taylor, Walter P., a new Ptarmigan from Mount Rainier, 146
- Teal, American Green-winged, 174
Blue-winged, 22, 69
European Green-winged, 174
Green-winged, 69, 174, 177
- Telmatodytes palustris plesius, 187
- Tern, Aleutian, 111, 203
Arctic, 72, 111, 176, 203
Black, 22, 24, 25
- Thrasher, Bendire, 164
Brown, 13, 114
Leconte, 118
Palmer, 73
Pasadena, 74
- Thrush, Alaska Hermit, 74
Coast Hermit, 135
Dwarf Hermit, 138, 187
Gray-cheeked, 185
Grinnell Water, 184
Monterey Hermit, 135
Northern Varied, 185
Olive-backed, 185
Russet-backed, 38
Varied, 75
Water, 191
Wood, 13, 43
- Tinamou, 169
- Titmouse, Gray, 80
Plain, 74
- Totanus flavipes, 30, 178
melanoleucus, 30, 178
- Towhee, Anthony, 74, 189
Brown, 80
Spurred, 74
White-eyed, 114
- Toxostoma curvirostre palmeri, 73
- Tringa canuta, 29
- Tryngites subruficollis, 31
- Turnstone, Ruddy, 31
- Tyler, John G., interesting records from the San Joaquin Valley region, 190
- U**
- Uria lomvia arra, 175
troille californica, 40, 41, 175
- V**
- Van Rossem, A., nesting of the Western Robin and Spotted Sandpiper, 39
- Van Rossem, A. J., and Bowles, J. Hooper, nesting of the Dusky Poor-will near Saugus, Los Angeles County, California, 61
- Vermivora celata celata, 184, 206
celata lutescens, 190
celata sordida, 74, 112, 190
ruficapilla gutturalis, 155
- Vireo, Bell, 43
Least, 159
Western Warbling, 85
- Vireo belli belli, 43
belli pusillus, 159
- Vireosylva gilva swainsoni, 85
- Vulture, 134
Turkey, 69
- W**
- Walker, Ernest P., southerly nesting records of the Arctic Tern in southeastern Alaska, 72; probable breeding of the Aleutian Tern in southeastern Alaska, 111; bird fatalities resulting from a shipwreck, 157

- Warbler, Alaska Myrtle, 184
 Audubon, 74, 158, 166
 Black and White, 76
 Black-throated Green, 186
 Calaveras, 155
 Connecticut, 158
 Dusky, 74, 112, 190
 Hooded, 186
 Kennicott Willow, 185
 Lucy, 142
 Lutescent, 139
 Mourning, 158
 Myrtle, 114
 Orange-crowned, 184, 206
 Pileolated, 18
 Red-faced, 6
 Wilson, 185
 Yellow, 69
 Yellow-rumped, 69, 105
 Water-thrush, 191
 Grinnell, 184
 Waxwing, Bohemian, 33, 72, 80, 110, 118,
 159, 184
 Cedar, 13, 74, 154, 159
 Wetmore, Alexander, a peculiar feeding
 habit of Grebes, 18; observations on
 the habits of the White-winged Dove,
 140; the Connecticut Warbler not
 known from Kansas, 158; the function
 of powder downs in herons, 168; the
 wing claw in swifts, 197
 Wheatear, 185
 Whip-poor-will, Stephens, 62
 Widgeon, European, 158
 Willet, 104
 Western, 30
 Willett, George, additional notes on the
 avifauna of Forrester Island, Alaska,
 138; comments upon the safety of sea
 birds and upon the "probable" occur-
 rence of the Northern Bald Eagle in
 California, 204
 Wilsonia pusilla pusilla, 185
 Wren, Alaska, 40
 Cactus, 135, 159
 Canyon, 80
 House, 69, 103, 114
 Marsh, 187
 Pribilof, 49
 Rock, 80, 171
 San Diego, 189
 Wren-tit, 74
 Pallid, 8
 Woodpecker, Alaskan Three-toed, 182
 Arctic Three-toed, 182
 Arizona, 6
 Cactus, 79
 California, 74, 190
 Lewis, 42
 Northern Downy, 181
 Northern Hairy, 181
 Red-bellied, 114
 White-breasted, 79
 Willow, 74
 Wyman, L. E., a correction concerning the
 European Widgeon, 158; notes on the
 Calliope Hummingbird, 206
- X
- Xanthocephalus xanthocephalus, 205
- Y
- Yellow-legs, 28, 104, 178
 Greater, 30, 178
 Lesser, 30
 Yellowthroat, 187
- Z
- Zamelodia melanocephala, 171
 Zech, Lillian, Western Evening Grosbeak in
 southern California, 111
 Zonotrichia coronata, 136
 leucophrys gambeli, 183, 187
 leucophrys nuttalli, 39, 187



For Sale, Exchange and Want Column.—Any Cooper Club member is entitled to one advertising notice in each issue free. Notices of over ten lines will be charged for at the rate of ten cents per line. For this department, address W. LEE CHAMBERS, Eagle Rock, Los Angeles County, California.

SPLENDID OPPORTUNITIES for study and for contact with advanced students are open to young men or women who have mastered the art of skeleton preparation. Those skilled in this work are in constant demand in museums and universities. Our methods are yours for the asking.—J. EUGENE LAW, Curator in Osteology, Museum of Vertebrate Zoology, Berkeley, Calif.

WANTED—North American Fauna, nos. 23, 25, 27, and 28. I also want Ridgway's "Birds of North and Middle America", parts I to IV.—ALEX WALKER, Blaine, Tillamook Co., Oregon.

WANTED in exchange: sets of A. O. U. 157, 158, 162, 163, 164, 165, 166, 260, 292b, 395, 399, 418, 424, 474f, 547a, 563a, 565, 634, 646b, 664, 711a, 726b, 732, 742b, 742c, 759e, etc., all with nests if possible. I offer sets of 20, 31a, 40a, 86.1, 486, 533, 567b, 646a, 722a, 726c, 728, 741, 748a, and many others.—J. HOOVER BOWLES, The Woodstock, Tacoma, Wash.

WANTED—Will pay cash or exchange for Bird-Lore, vol. I, 3; index; vol. II, 1; vol. III, 1-2-3; vol. IV, 1-2; vol. VII, 1; vol. X, 4-5-6; vol. XIII, 4. Ornithologist & Oologist vols. VI and VII complete; vol. XI, 2-3-4-5-6; vol. XII, 10. Maynard's Birds of Eastern North America; McIlwraith's Birds of Ontario, 2nd edition.—H. H. JOHNSON, Pittsfield, Maine.

WANTED—Following numbers of The Auk to complete my set: vol. III, no. 4; vol. VI, no. 1; XXVIII, no. 3.—TRACY I. STORER, Museum of Vertebrate Zoology, Berkeley, Calif.

WANTED—Ridgway's "Birds of North and Middle America", vols. 2 and 3; paper covers preferred; must be in good condition. Will pay reasonable cash price.—F. SEYMOUR HERSEY, Taunton, Mass.

THE COOPER CLUB has just fallen heir to the following publications which may be of interest to its members. We are quoting them at prices that just about cover trouble and expense of mailing.

The Story of the Farallones, Barlow, 1897	20c
Birds of the Santa Barbara Islands, Grinnell, 1897	50c
Birds of Los Angeles County, Grinnell, 1898	20c

Address W. LEE CHAMBERS, Business Manager, Eagle Rock, Los Angeles, Calif.

I want odd volumes of Proceedings of the Biological Society of Washington.—W. LEE CHAMBERS, Eagle Rock, Los Angeles, Calif.

AUKS WANTED—I have a nearly complete set, but lack the first two volumes, 1834 and 1885. Also lack Bulletin Nuttall Ornithological Club, vol. 1, no. 2; vol. 2, no. 3. If you have any of the above to spare, please let me know about it. R. C. MCGREGOR, Bureau of Science, Manila, P. I.

CENTRAL AMERICAN BIRD SKINS—I will be pleased to correspond with anyone who might be interested in general collections from Guatemala and Costa Rica, and later on from Panama. The quality of this material cannot be surpassed.—AUSTIN P. SMITH, care of American Consulate, San Jose, Costa Rica.

MEETINGS OF THE COOPER ORNITHOLOGICAL CLUB

Southern Division: 8 P. M., fourth Thursday of month, at Museum of Vertebrate Zoology, University of California, Berkeley. Take any train or car to University Campus. The Museum is the corrugated iron building on south side of campus just north of football bleachers.—MRS. AMELIA S. ALLEN, Sec'y, 37 Mosswood Road, Berkeley, Calif.

Northern Division: 8 P. M., last Thursday of month, at Museum of History, Science, and Art, Exposition Park, Los Angeles. Take car marked "University", west-bound on 5th Street (in down-town district); get off at 39th Street and Vermont Avenue. One long block east to Park. The Museum is the building with the large dome.—L. E. WYMAN, Sec'y, care of Museum.

Intermountain Chapter: Get date and place from the Sec'y, ASHBY D. BOYLE, 351 5th Ave., Salt Lake City, Utah.

San Bernardino Chapter: Get date and place from the Sec'y, M. FRENCH GILMAN, Banning, Calif.

